

# **State Training Standards**

## Self-Assessment & Learning Goals for General Training Standards Workshop

This questionnaire is designed to help you: (a) assess what it is you do know about training standards; and (b) identify what you want to know more about. Use the scale below to assess your current skill or knowledge level in the “Where I’m at” column. Put a check or star in the “goal” column for the areas you would most like to improve today. Use these as your primary learning goals.

- 0 = I have little or no experience, skill or knowledge in this area  
 1 = I have some skill or knowledge, but need much improvement in this area  
 2 = I have substantial skill/knowledge in this area, but would benefit from a few significant improvements  
 3 = I know and do this well (no assistance needed in this area)

	<u>Where I’m at</u>	<u>Goal</u>
1. Organizing training documents for your repeated use	_____	_____
2. Organizing training documents for others to use	_____	_____
3. Planning training in an experiential learning sequence	_____	_____
4. Planning training to engage individual learning styles	_____	_____
5. Writing effective learning objectives	_____	_____
6. Writing course outlines/training plans	_____	_____
7. Designing/selecting meaningful student evaluations	_____	_____
8. Designing/selecting useful training event evaluations	_____	_____

# Learning Objectives & Training Plan Format

An effective Training plan format will contain the following elements (see Appendix F):

**A Learning Objective** – This statement will specify exactly what the learner will be able to know or do at the end of the learning session. This ties information to application. To be effective it must:

- Be stated as a verb (see Appendix E)
- Be measurable

Examples – Apply necessary procedures in entering data into user fields.  
Demonstrate effective use of a meeting agenda.  
Identify the 3 requirements under state policy 101(D).

**A Method** – identifies how the learning activity is to be achieved or how the learner will acquire the new skill/knowledge (ie. Group discussion, written exercise, lecture, experimental exercise, video).

**An Activity Description** - explains how the method is to be carried out. It outlines instructions for the learning experience or highlights key ideas to pull out in a discussion or lecture.

**Timing** – states how many minutes the activity should take.

**Materials** – lists equipment and quantity needed and any preparations that are necessary before training is conducted.

## Pointers

- Check the learning objective against the method and activity description. If the learning objective is not adequately filled by the activity, you may need to modify.
- Keep learning objective short, succinct.
- Start training plans with learning objectives, then fill in the details.
- A learning objective may have more than one activity/method addressing it.
- Remember the old adage, “tell them what you’re going to tell them, tell them, then tell them what you told them?” Now we can say, “tell them what they will find, help them find it, make sure they found it.”
- Psychological research indicates that people remember what they hear first and last. Make sure activities don’t last too long, and build in breaks.

# The Essence of Learning Objectives

***A Learning Objective is a statement specifying what the learner will do to demonstrate applied knowledge, skills, or behaviors.***

Major parts of a learning objective statement:

- 1) Action- What the learner will do (ie. measure, identify, record, write)
- 2) Condition- Circumstances under which the learner will do it (ie. using a case study, while dressed in protective gear, in a simulation)
- 3) Standard- What level the learner must perform to (ie. under 5 minutes, with 90% accuracy, with no assistance)

Tips:

- State objectives in measurable terms (avoid actions such as understand, appreciate, feel, etc. that are difficult to measure).
- Use enough conditions.
- Keep objectives simple.
- Avoid instructional descriptions such as “after 2 practice sessions and group discussion...” (while these may help the student prepare to reach the objective, they are not the objective)

See ASTD Info-line *Instructional Objectives*, December 1997, Issue 9712.

# General Standards for Designing Training Courses

This document provides standards for designing and documenting training courses.

## 1.0 Facilitator Guide & General Documentation

- 1.1 For each course, documentation identified in the *Checklist of General Standards for Designing Training Courses* should be compiled in a single binder, which will serve as a facilitator guide. Each binder should be labeled with:
  - A. Course title
  - B. Date of creation or revision
  - C. Names of course designers/revisers
- 1.2 The facilitator guide should include a facilitator preparation checklist, identifying:
  - A. Any peripheral material, not included in the guide, that should be reviewed by a facilitator.
  - B. A list of handouts or materials needed to be produced for participants.
  - C. A list of equipment and supplies needed.
  - D. A list of prerequisites, requirements or materials participants should come prepared with.
  - E. Any facility/space requirements, set-up or unusual preparation needed prior to facilitating.
- 1.3 The facilitator guide should include one master copy of:
  - A. handouts for participants
  - B. instructions for facilitating specified learning activities
  - C. printed materials used in learning activities
  - D. student evaluation instrument(s)
  - E. course evaluation instrument(s)

## 2.0 Learning/Performance Objectives

- 2.1 Training course designers should clearly identify the target audience. Identifying audience needs may include:
  - A. a formal or informal assessment of the skill/knowledge needs of the prospective audience.
  - B. determining prerequisites or selection criteria for prospective participants.
  - C. a differentiated list of learning needs for each audience, if multiple audiences are identified.
- 2.2 Learning or performance objectives should be formally written, specifying:
  - A. what the learner will be able to perform as a result of the learning event;
  - B. the conditions, circumstances or tools with which the student will demonstrate their ability to perform;
  - C. the criteria by which the student's demonstration will be evaluated.

\* For information on writing effective objectives see *Plattner, Francis. Instructional Objectives (Dec 1997). Alexandria, VA: ASTD Info-line.*
- 2.3 All learning or performance objectives must be addressed by one or more learning activities.

## 3.0 Instructional Strategies

- 3.1 A course should contain learning activities that accommodate all 4 major learning styles (see **Appendix A**).
- 3.2 A course should be designed to follow the sequence of the experiential education model (Kolb, 1971):
  - A. Concrete Experience
  - B. Reflective Observation
  - C. Abstract Conceptualization
  - D. Active Experimentation(see **Appendix B**)

#### 4.0 Course Outline/Training Plan

4.1 Course content should be outlined in the order in which it is to be addressed in the course.

4.2 The outline of course content should identify the delivery method(s) that will be used to deliver the course (ie. self-guided CD-rom, web-based self-study, instructor-led) .

4.3 Instructor-led courses should be outlined in a format that contains the following elements:

A. descriptions of each learning activity (ie. case studies, simulations, games, group discussions) used in the course. Instructions for learning activities may be included in the outline or recorded on a separate document found in the facilitator guide.

B. identification of which performance objective(s) are addressed by each learning activity.

C. approximation of how many minutes each learning activity should take to complete.

D. a list of materials, equipment and quantity needed for each learning activity.

\*An example of a training plan can be found in the **Appendix C**.

#### 5.0 Student Evaluation

5.1 Courses should include a measurement of each participant's achievement of the learning or performance objective(s). Measurements may take the form of a test, practical exercise, written paper, oral presentation or other substantive evaluation.

5.2 Evaluation instruments should be accompanied by defined conditions, circumstances or tools with which the student will demonstrate their knowledge or skill, and the criteria by which the student's demonstration will be evaluated (see 2.2 B and C of *Learning/Performance Objectives*).

5.3 A consistent rating scale should be defined for student evaluations in a course (ie. pass/fail, percentage). Rating scales should be designed to clearly indicate to a student whether they achieved course objectives.

5.4 Ratings should be documented in the Utah Training Connection (training records) system.

#### 6.0 Course Evaluation

6.1 Each time a course is delivered it should be evaluated on one or more of the following measures:

A. the extent to which the objectives were met

B. the difference between pre- and post- knowledge or skill

C. the effectiveness of the learning activities employed

D. the quality and effectiveness of participant materials and media

E. relevance of the course material to participants' jobs

F. the skill and knowledge of the facilitator

G. the cost savings/workplace efficiency resulting after course completion

H. transfer of the knowledge/skills to the workplace

6.2 Each course should have a course evaluation instrument that is consistent in format (that can be measured over time, comparing one delivery to another) and is able to collect quantifiable responses.

6.3 Evaluation instruments should be administered at the same period of time for each course (ie. immediately following the course, 6 weeks after the course)

\*An example of a course evaluation can be found in the **Appendix D: Standard Class Evaluation**.

# LEARNING STYLE INVENTORY BASED ON DAVID KOLB'S MODEL

(This instrument is for instructional purposes only. No claims are made as to its validity or reliability.)

<p><b>Part I: Concrete Experience vs Abstract Conceptualization</b></p> <p><b>1. I prefer</b></p> <p>A. hands-on learning experiences.</p> <p>B. learning through thinking and reasoning.</p> <p><b>2. I tend to</b></p> <p>A. rely on feelings when making decisions.</p> <p>B. rely on logical reasoning when making decisions.</p> <p><b>3. I learn more effectively from:</b></p> <p>A. my peers.</p> <p>B. my teachers.</p> <p><b>4. I like learning through:</b></p> <p>A. Simulations</p> <p>B. lectures.</p> <p><b>5. I learn well by:</b></p> <p>A. practical experience.</p> <p>B. Applying theories to hypothetical situations.</p> <p><b>6. I am best at learning:</b></p> <p>A. Facts</p> <p>B. Concepts</p>	<p><b>Part II: Active Experimentation vs Reflective Observation</b></p> <p><b>1. I learn best through:</b></p> <p>C. active involvement in projects.</p> <p>D. observation.</p> <p><b>2. I would rather:</b></p> <p>C. do volunteer work with disadvantaged youth.</p> <p>D. read about disadvantaged youths.</p> <p><b>3. I prefer assignments that</b></p> <p>C. require me to work examples</p> <p>D. require me to think about situations.</p> <p><b>4. I learn well through:</b></p> <p>C. participating in a discussion.</p> <p>D. Listening to what others have to say.</p> <p><b>5. I tend to</b></p> <p>C. jump right in and do something new.</p> <p>D. think about possible outcomes before trying something new.</p> <p><b>6. I learn best :</b></p> <p>C. by doing.</p> <p>D. watching and then reflecting.</p>
<p><b>Total of A's _____ Concrete Experience (CE) Score</b></p>	<p><b>Total of C's _____ Active Experimentation (AE) Score</b></p>
<p><b>Total of B's _____ Abstract Conceptualization (AC) Score</b></p>	<p><b>Total of D's _____ Reflective Observation (RO) Score</b></p>

# Learning Style Inventory Interpretation

**Interpretation:** A responses = Concrete Experience (CE)

B responses = Abstract Conceptualization (AC)

C responses = Active Experimentation (AE)

D responses = Reflective Observation (RO)

**Converger** = Those with highest scores in AC and AE. This person's greatest strength lies in the practical application of ideas. A person with this style seems to do best in those situations where there is a single correct answer or solution to a question or problem and can focus on specific problems or situations. Research on this style of learning shows that Convergers are relatively unemotional, preferring to deal with things rather than people. They often choose to specialize in the physical sciences, engineering and computer sciences.

**Diverger** = Those with highest scores in CE and RO. Divergers have characteristics opposite from Convergers. Their greatest strengths lie in creativity and imaginative ability. A person with this learning style excels in the ability to view concrete situations from many perspectives and generate many ideas such as in a brainstorming session. Research shows that Divergers are interested in people and tend to be imaginative and emotional. They tend to be interested in the arts and often have humanities or liberal arts backgrounds. Counselors, organizational development specialists, and personnel managers tend to be characterized by this learning style.

**Assimilator** = Those with highest scores in AC and RO. This person's strengths lie in the ability to understand and create theories. A person with this learning style excels in inductive reasoning and in synthesizing various ideas and observations into an integrated whole. This person, like the Converger, is less interested in people and more concerned with abstract concepts, but is less concerned with the practical use of theories. For this person it is more important that the theory be logically sound and precise; in a situation where a theory or plan does not fit the facts the Assimilator would be likely to disregard or re-examine the facts. As a result, this learning style is more characteristic of the basic sciences and mathematics rather than the applied sciences. Assimilators often choose careers involving research and planning.

**Accommodator** = Those with highest scores in CE and AE. These are polar opposites from Assimilators. Their greatest strengths lie in carrying out plans and experiments and involving themselves in new experiences. They are risk-takers and excel in those situations requiring quick decisions and adaptations. In situations where a theory or plan does not fit the facts, they tend to discard it and try something else. They often solve problems in an intuitive trial and error manner, relying heavily on other people for information. Accommodators are at ease with people but may be seen as impatient and pushy. Their educational background is often in practical fields such as business or education. They prefer action oriented jobs such as nursing, teaching, marketing or sales.

**References:** Kolb, D. (1985). Learning style inventory. Boston, MA: McBer and Company

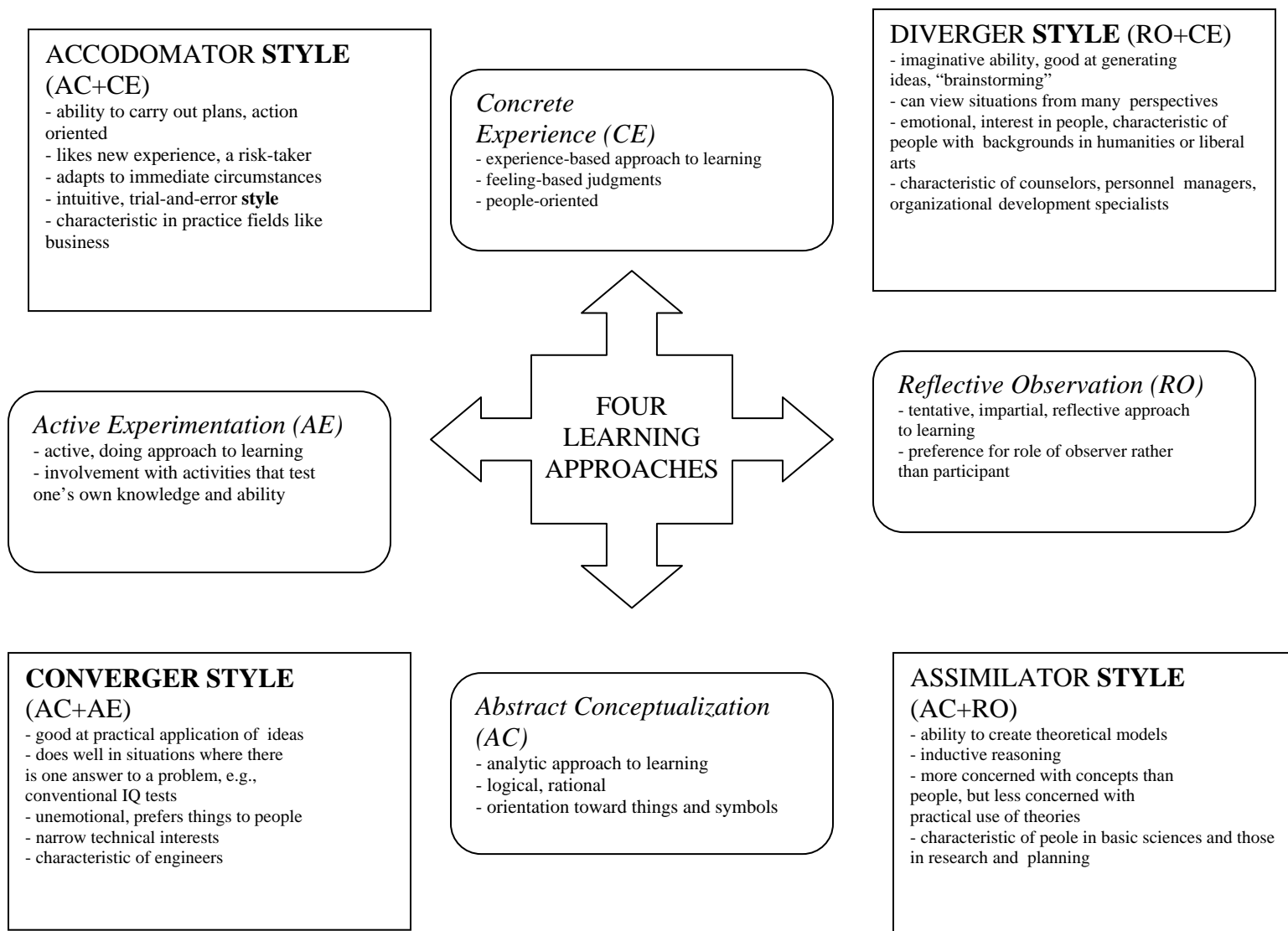
Lamberski, R. (2002). Kolb learning style inventory. Available at

<http://www.coe.iup.edu/rjl/instructioncm150/selfinterpretation/kolb.htm>



# THE FOUR LEARNING STYLES

## AND THEIR CONTRIBUTING LEARNING APPROACH



## Appendix A: Four Major Learning Styles

### Diverger

Divergers need time to reflect, especially through talking and feeling. They do well in small group discussion, but have difficulty with lectures.

*Favorite diverger question: "Why?"*

Divergers excel at:

- gathering information in novel ways
- imagining implications
- making sense of ambiguity
- open-minded listening

Learning activities to engage divergers:

- information gathering activities
- group discussions and role plays
- problem solving activities
- tasks of evaluating, revising, inventing new ideas

### Assimilator

Assimilators like information presented in a highly organized format, and benefit if they have time to think about the material. Assimilators learn best from reading, researching, and listening to lectures.

*Favorite question: "What?"*

Assimilators excel at:

- organizing information
- building conceptual models
- designing experiments
- analyzing quantitative data

Learning activities to engage assimilators:

- organizational and design activities
- building models and theories
- analysis activities
- written papers and reading assignments

### Converger

Convergers like to understand how things work, and learn best in a safe trial and error experimental environment with stringent guidelines. Coach convergers with practice and frequent feedback. Convergers are doers. They learn from lecture if coupled with experimentation.

*Favorite question: "How?"*

Convergers excel at:

- creating new ways of thinking and doing
- experimenting with new ideas
- choosing the best solution
- setting goals

Learning activities to engage convergers:

- decision-making activities
- experiments and simulations
- lecture accompanied with application activities
- use of diagrams, graphs, and maps

### Accommodator

Accommodators flourish under the least amount of constraint. Discovering through doing is how they learn. Assign them broad learning tasks and monitor to make sure they don't stray too far from your objectives, or do something unsafe. Accommodators are not only hands-on, they need to talk about it at length. They brainstorm while in action.

*Favorite question: "What if?"*

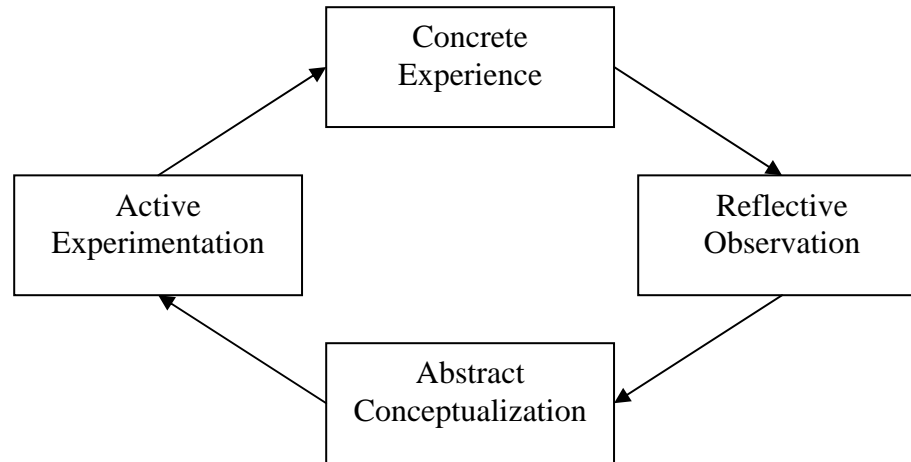
Accommodation learners excel at:

- tasks that lack structure
- seeking and exploiting opportunities
- being personally involved and dealing with people
- experimenting with other people's ideas

Learning activities to engage accommodators:

- experiential exercises
- action oriented group activities
- hands-on practice and practicum experiments
- large group discussions and performances

## Appendix B: Sequence of the Experiential Education Model



**Phase 1: Concrete Experience** – Seeking usability, learning by doing, and testing theories in common sense ways, needing to know how things work, perceiving information abstractly and processing it actively, using factual data to build designed concepts, enjoying hands-on experience, solving problems, setting own goals and working toward them, needing to know how things you are asked to do will help in real life, needing to try things for yourself.

**Phase 2: Reflective Observation** – During this phase concepts are introduced, displayed and demonstrated. Learners seek meaning and learn by listening and sharing ideas, perceiving information concretely, processing information reflectively, being involved personally, interest in validating one's own experience, tendency toward quiet introspection, functioning through social interactions.

**Phase 3: Abstract Conceptualization** – Seeking facts, referring to authorities for knowledge, learning by thinking through ideas, perceiving information abstractly, processing information reflectively, interest in idea concepts, focus on obtaining information before deciding, reexamining facts, inclination toward traditional classroom, learning goals are intellectual recognition and self satisfaction.

**Phase 4: Active Experimentation** – Seeking hidden experiences and possibilities, learning by trial and error, perceiving information concretely and processing it actively, accepting change, enjoying variety, inclination toward situations which are ambiguous or demand flexibility, tendency to take risks, focus on personal needs and gaining insight about self, learning goal is to bring action to concepts.

## Appendix C: Training Plan

### TRAINING SKILL'ET: *A Training Skills Workshop*

Updated 7/25/02

OBJECTIVES: Participants will:

1. compare learning styles and modes
2. identify the experiential learning cycle
3. create a plan for application of a variety of learning methods
4. organize training using a training plan format
5. perform a number of tools to involve students in training
6. locate appropriate evaluation/measurement tools

\* Assign participants ahead of time to bring training material from a training they currently conduct. (ie. a training agenda, pieces of content they struggle with presenting, boring material, unclear objectives)

LEARNING OBJECTIVE	METHOD	ACTIVITY	MATERIALS	TIMING
Introduction-get participants on track	Ice breaker; small group discussion	<b>Best learning experience as an adult.</b> List on 4 cards (1 idea per card) what made it so good. Discuss and summarize thoughts in small groups. Each small group reports out to class.	blank 3x5 cards	20 min
	review	Review class outline/agenda. Relate areas identified in last discussion to areas that will be addressed. Ask for any additional expectations participants might have.	Agenda on Flipchart w/ extra room	5 min
	pre-eval tool	Deliver pre-eval survey for participants to self assess. Put names on back (they'll be copied at end of class). When complete, ask if participants have anything else they'd like to addressed in outline/agenda.	pre-eval surveys	10 min.
Discern between auditory, visual & kinesthetic modes	Demonstration	<b>Fruit Smoothies.</b> Explain the process for making fruit smoothies to demonstrate auditory mode. Show smoothie recipe and allow students to take notes as a visual mode demonstration. Choose a participant to help make the fruit smoothie. When completed ask which mode would be most helpful for effectively learning a task. Share smoothie with class.	Low fat strawberry yogurt, Mixed berries, Frozen orange juice concentrate, Blender, Glasses, Spoon, Napkins. Powerpoint slides.	20 min
Structure a learning experience using auditory, visual & kinesthetic modes	Group application exercise and demo	<b>"How To..." Exercise.</b> Divide class into groups of three. Give each group an envelope with their "How To" activity. Stress creativity for the activity when showing the class their process.	Potato, orange, spoon, peeler, tools	25 min
<b>CHECK-IN &amp; BREAK</b> (check-in to see if objectives are being fulfilled)				5 min

Structure a learning experience using auditory, visual & kinesthetic modes	attention activity; practical exercise in small groups (2-3)	<b>Attention activity:</b> use symbols of ear, eye, and hand to represent the 3 modes of learning. <b>Application to current training.</b> Have participants apply the 3 modes to one piece of training material they currently use. Do this in small groups. Possibly give groups the same piece of material to see the various ways modes can be applied. Groups may combine or isolate modes.	Sample material from a current training (students should bring this)	15 min
Relate adult learning concepts to a learning experience	video	Show clip from "What Women Want" about adult learning principles.	video tape of "What Women Want" (cued up)	5 min
	lecturette/large group discussion	Review 6 adult learning principles. Ask participants to relate this to "Best learning experience as an adult".	Powerpoint slides.	15 min
Recognize 4 key learning styles	quiz	<b>4 Corners Exercise.</b> Distribute quiz. Have participants complete the quiz. When complete, count scores and describe what style of adult learner they are.	quiz, score sheet	5 min
	lecturette	Distribute the <i>Implications of Learning Styles</i> handout. Briefly describe the 4 learning styles. Focus on strengths and learning strategies.	Powerpoint slides.	10 min
Understand the experiential learning cycle	lecturette	Distribute handouts. Show how we've followed the cycle. Solicit comments and questions.	experiential learning cycle handout	10 min
<b>CHECK-IN &amp; BREAK (check-in to see if objectives are being fulfilled)</b>				5 min
Design a short training plan using the <i>Training Plan Format</i>	review lecturette w/ hand-out	<b>Hand out:</b> <i>Performance-based Learning Objectives &amp; Training Plan Format</i> . Briefly review the content with particular emphasis on the parameters for determining a learning objective.	<i>Performance-based Learning Objectives &amp; Training Plan Format</i> hand-outs	15 min
	written exercise; pair reflection	Each participant receives a page containing some content to be covered in a training. Each student writes a learning objective, an activity, method and materials (leave top space blank). Participants are grouped in twos. Each pair determines asks/discusses reflective questions (Is the objective observable? Does the activity accomplish the objective? What modes are used? What's the next logical sequence in the training plan?)	blank <i>Training Plan Format</i> sheets; training content (students should bring this); questions posted on flipchart	15 min

Recognize 11 verbal techniques for facilitators	video	List 11 key verbal techniques and briefly define: asking q's, probing, paraphrasing, redirecting, referencing, positive reinforcement, including quieter members, encouraging divergent views, shifting perspective, summarizing, bridging. Play video demonstrating 11 techniques for facilitators. After each segment stop tape and have class identify technique used.	video tape w/ segments; VCR/TV; <i>11 Techniques</i> hand-out	20 min
Apply one challenging verbal technique	peer play	Ask each participant to identify one technique they find challenging. Divide class into pairs to apply most challenging verbal technique. Participants take turns helping one another employ the technique in a role play or hypothetical situation. Each participant coaches the other.		10 min
<b>CHECK-IN &amp; BREAK (check-in to see if objectives are being fulfilled)</b>				5 min
Identify 3 ways to get participants on track	experiential exercise	<b>Polarities Exercise:</b> Ask participants to move to one side of room or another based on their opinion of the following questions. Have participants discuss the reason for this opinion. ~Is an effective trainer more like a chef or a waiter? ~Is effective training more like an appetizer or a dessert? ~Do you prefer training that is like fast-food or fine dining?		10 min
	written exercise	Explain what "getting on track" is. Reference back to tools used at the beginning of class and after each break (all are examples of "getting on track"). Have participants call out other tools for getting on track. List them on flipchart. Entertain questions. Have participants create one way to get participants on track for their training plan. Instruct them to enter this on the top space of the <i>Training Plan Format</i> .	Training Plan	15 min
Design usable evaluation tool	written exercise	Hand out <i>Evaluating Training</i> . Briefly review. Review sample evaluations. Have participants determine its effectiveness for use in their training (Does it measure what you want? How does it determine if learning objective is met? If not, how do you change it?). Participants will identify "What" and "How" to measure in their own training.	Sample evaluations from current training; <i>Evaluating Training</i> hand-out	5 min

Evaluate the workshop	Self-eval	Instruct participants to revisit their self-evaluation and assess where they feel they are at at the conclusion of the training in the "After" column. Have them identify a couple skills to continue fine-tuning. Collect the evals, copy, and return to participants. *Make sure names are on back of evals.	Self-evals (used at beginning of training); access to copy machine	5 min
	Eval	Distribute and collect workshop evaluation feedback.	Workshop Evals	5 min

## Appendix D: Standard Class Evaluation

Class	Date	Instructor
-------	------	------------

For each item below, circle the number you believe best applies, where 1= strongly disagree, 2= disagree, 3= not sure, 4= agree, 5= strongly agree

### This class...

provided relevant knowledge and skill exercise to help me increase my performance as a current/future manager.	1	2	3	4	5
addressed the performance outcomes identified in the syllabus.	1	2	3	4	5
used learning activities and evaluation methods that were relevant and helpful in the learning process.	1	2	3	4	5
used texts, visuals and course materials that were relevant and helpful.	1	2	3	4	5
had an appropriate assignment workload.	1	2	3	4	5

### The instructor...

was well prepared and organized.	1	2	3	4	5
delivered specific feedback regarding my performance relative to the expected performance outcomes.	1	2	3	4	5
was knowledgeable in the subject matter.	1	2	3	4	5
addressed my needs and questions.	1	2	3	4	5
used teaching/facilitation methods that worked for me.	1	2	3	4	5
made effective use of time.	1	2	3	4	5

The most helpful learning experience(s) in this workshop for me was:

I would recommend the following improvements:



## Appendix E: Action Verbs

### ACTION VERBS FREQUENTLY USED IN WRITING TRAINING OBJECTIVES

administer	consolidate	expedite	proceed
adopt	consult	formulate	process
advise	control	furnish	promote
analyze	coordinate	implement	propose
anticipate	correlate	improve	provide
appraise	correspond	initiate	recommend
approve	delegate	inspect	report
arrange	design	instruct	represent
assemble	determine	interpret	research
assign	develop	investigate	resolve
assist	devise	issue	review
assume	direct	maintain	revise
assure	discuss	monitor	schedule
authorize	dispose	negotiate	secure
calculate	disseminate	notify	select
circulate	distribute	obtain	sign
clear	draft	operate	specify
collaborate	endorse	participate	stimulate
collect	establish	perform	submit
compile	estimate	place	supervise
concur	evaluate	plan	train
conduct	execute	practice	transcribe
confer	exercise	prepare	verify

Silberman, Mel and Carol Auerbach, Active Training, A Handbook of Techniques, Designs, Case Examples, and Tips. New York, Lexington Books, 1990, pg. 35.

**Course Title:**

OBJECTIVES: Participants will be able to:

- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

LEARNING OBJECTIVE	METHOD	ACTIVITY	MATERIALS	TIMING